



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Samuel C. Weaver

Serial No. 09/838,866

Filed: April 20, 2001

Art Unit: 3643

Patent Examiner: Nguyen, Son T.

Our Ref: 01-211

Customer No. 30058

METAL MATRIX  
COMPOSITE HORSESHOE

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

June 6, 2005

**APPLICANT'S REPLY BRIEF TO EXAMINER'S ANSWER DATED APRIL 5, 2005**

This appeal is to decide whether, considering Eom<sup>1</sup> in view of Weaver '607<sup>2</sup>, the invention of Claims 1-16 was obvious to one of ordinary skill in the art at the time that the invention was made.

The claimed invention is a "horseshoe" that has "improved vibration damping and stiffness". The horseshoe is made of a composition that is selected from the field of "metal matrix composites". The selected metal matrix composite is composed of a metal selected from the group of aluminum, magnesium, titanium and mixtures thereof and silicon boride selected from the group of silicon hexaboride and silicon tetraboride and mixtures thereof. (Appl. Pg. 2,

<sup>1</sup> U.S. Patent No. 5,344,607 to Eom et al.

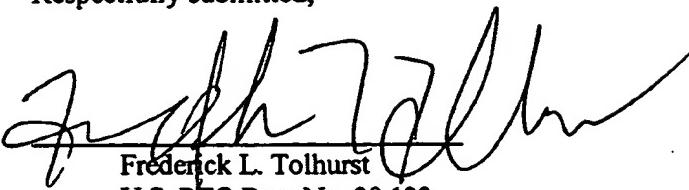
<sup>2</sup> U.S. Patent No. 5,573,607 to Weaver.

06/16/2005 DBATES 0000005 032026 09838866  
01 FC:1251 from the group of silicon hexaboride and silicon tetraboride and mixtures thereof. (Appl. Pg. 2,  
120.00 DA

The Commissioner is hereby authorized to charge Deposit Account No. 03-2026 for any fees associated with this Reply Brief.

Respectfully submitted,

By:



Frederick L. Tolhurst  
U.S. PTO Reg. No. 28,123  
Cohen & Grigsby, P.C.  
11 Stanwix Street, 15<sup>th</sup> Floor  
Pittsburgh, PA 15222  
(412) 297-4900

974503\_1